

**REMARKS**

Claims 21 – 25 and 27 – 44 are currently pending in the application. By this amendment, claims 21, 29 and 35 have been amended. Applicants submit that no new matter has been added by the above amendment. Support for the amendment, may be found for example, at least at paragraphs [0025], [0031] and [0034] (as numbered in the published application 2002/0130902). Reconsideration of the rejected claims in view of the above amendment and following remarks is respectfully requested.

***Entry of Amendment Proper***

Applicants submit that the entry of the above amendment is proper. Applicants submit that the entry of the amendment is proper, since such amendment places the application in condition for allowance or, alternatively, places the application in better form for appeal. No new claims are added. Applicants further submit that no new issues are raised requiring further search and/or consideration by the Examiner. Specifically, the above amendments were made as a clarifying amendment and to address *In re Bilski* issues, and not to overcome any applied prior art.

***Interview Summary***

Applicants gratefully acknowledge the courtesy extended to their representative in telephone interviews dated December 16, 2009 and December 23, 2009. In the interviews, Applicants' representative and the Examiner discussed the outstanding Office Action. More

specifically, while the Examiner indicated that Applicants' arguments have overcome the applied prior art, the Examiner wanted to clarify some of the claim features. As such, Applicants' representative and the Examiner discussed claim language to clarify the claim features. Additionally, with regard to claim 21, the Examiner raised issues regarding Bilski (i.e., the machine or transformation test). Applicants have amended the independent claims in accordance with the above-noted discussions.

The Examiner, however, raised the concern that the claim phrase "short-term" may raise issues of indefiniteness. Applicants respectfully submit that the phrase "short-term" does not render the claims indefinite. According to MPEP 2173.02, the test for definiteness under 35 U.S.C. 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). Moreover, definiteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

In view of the above, Applicants respectfully submit that those skilled in the art would understand what is claimed when the claim is read in light of the specification. That is, Applicants submit that those skilled in the art would understand what is claimed when the claim language analyzed in light of: (A) the content of the particular application disclosure; (B) the teachings of the prior art; and (C) the claim interpretation that would be given by one possessing

the ordinary level of skill in the pertinent art at the time the invention was made.

Thus, Applicants respectfully submit that the claim phrase "short-term" does not render the claims indefinite. As such, Applicants respectfully submit that the claims are in condition for allowance.

### ***Amendment to Claims***

Applicants are not conceding in this application that previously presented claims 21, 29 and 35 are not patentable over the art cited by the Examiner, as the present claim amendments are for facilitating expeditious prosecution. Applicants thus reserve their rights to file one or more continuation applications directed to broader aspects of the invention, as recited in previously presented claims 21, 29 and 35.

### ***35 U.S.C. § 103 Rejections***

Claims 21, 24, 28 – 30, 33 and 34 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,313,921 issued to Kadowaki ("Kadowaki") in view of "Forecast Pro" and U.S. Patent No. 7,072,888 issued to Perkins ("Perkins"). Claims 22, 31, 32 and 35 – 44 were rejected under 35 U.S.C. § 103(a) over Kadowaki in view of Forecast Pro, U.S. Patent No. 6,064,980 issued to Jacobi, et al. ("Jacobi") and Perkins. Claim 27 was rejected under 35 U.S.C. § 103(a) over Kadowaki in view of Forecast Pro, Perkins, Jacobi and U.S. Patent No. 6,556,963 issued to Tetzlaff ("Tetzlaff"). Claims 23 and 25 were rejected under 35 U.S.C. § 103(a) over Kadowaki in view of Forecast Pro, Perkins and U.S. Patent No. 6,044,376 to Kurtzman II ("Kurtzman").

These rejections are respectfully traversed.

In the interviews of December 16, 2009 and December 23, 2009, the Examiner acknowledged that the applied prior art does not render obvious the present invention. As such, Applicants respectfully submit that the prior art rejections have been rendered moot. In any event, Applicants have presented below arguments as to why the Examiner has not established a *prima facie* case of obviousness with regard to the pending claims.

In order to reject a claim under 35 U.S.C. §103(a), the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP §2142. Applicants submit that no proper combination of the applied art teaches or suggests each and every feature of the claimed invention. Additionally, Applicants submit that the references teach away from the Examiner-proposed combination. Furthermore, Applicants submit that the Examiner has maintained his rejections presented in the Non-Final Office Action dated March

18, 2009 without addressing Applicants proffered arguments. As such, as discussed further below, Applicants respectfully submit that the Examiner has not presented a clear record or a complete action.

*Independent Claims 21 and 29 over Kadowaki, Forecast Pro and Perkins*

The present invention relates to a method and apparatus for tailoring content of information delivered over the Internet. Claim 21 recites, in pertinent part:

... actively selecting, by analysis of the relevant profile elements using the processor, a personalization engine, which is configured to provide an optimal performance, from a plurality of personalization engines by the arbiter, the arbiter refining and altering a selection based on a number and type of the relevant profile elements, wherein the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, the collaborative filtering engine provides an optimal performance when information is known about a group of users based on statistical knowledge, the predictive-modeling personalization engine provides an optimal performance when a user is unknown based on a short-term usage path of the user, and the business-rules engine provides an optimal performance when the personalization engine needs to change in response to one or more changing circumstances...

Claim 29 recites, in pertinent part:

... a plurality of personalization engines for selecting at least one personalized content object from the content database, wherein the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, the collaborative filtering engine provides an optimal performance when information is known about a group of users based on statistical knowledge, the predictive-modeling personalization engine provides an optimal performance when a user is unknown based on a short-term usage path of the user, and the business-rules engine provides an optimal performance when the personalization engine needs to change in response to one or more changing circumstances;

the arbiter selecting a personalization engine from the plurality of personalization engines, and the selected personalization engine selects the at least one personalization content object from the content database via a content

database proxy;...

Furthermore, the specification describes the collaborative filtering engine, the predictive-modeling personalization engine, and the business-rules engine at paragraph [0025], which states (emphasis added):

[0025] One kind of personalization engine may be optimal for one set of circumstances, yet sub-optimal for another set of circumstances. For example, when a great deal is known about past behavior of a large set of users, a collaborative-filtering engine, which is based on statistical clustering, may outperform a business-rules engine or a predictive modeling engine. On the other hand, when the identity of the user is unknown, a predictive-modeling engine, which observes a user's behavior and therefrom makes predictions regarding the nature of the user, may outperform a business-rules engine or a collaborative-filtering engine. Finally, when circumstances change quickly and the operation of the personalization engine needs to change in response to these circumstances, for example in the context of e-commerce web sites that offer cross-sell and up-sell promotions, a business-rules engine may be the most suitable choice.

In view of the above, Applicants submit that the collaborative-filtering engine utilizes statistical clustering in order to determine an optimal information presentation. In contrast, the predictive-modeling engine determines an optimal information presentation by observing a user's behavior and therefrom making predictions regarding the nature of the user. Furthermore, when circumstances change quickly and the operation of the personalization engine needs to change in response to these circumstances, a business-rules engine may be the most suitable choice for determining an optimal information presentation. As should be understood by those of ordinary skill in the art, a business rules engine is, for example, a system that executes one or more business rules in a runtime production environment. The rules might come from legal regulation,

company policy, or other sources. In the example provided above, the business rules engine is based on policies (e.g., cross-sell and up-sell promotions) of an e-commerce web site.

Applicants submit that the combination of references do not teach or suggest each of the features of claims 21 and 29. For example, Applicants submit that the combination of references do not teach or suggest wherein the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, as recited in claims 21 and 29. Additionally, Applicants submit that the combination of references do not teach or suggest selecting, by analysis of the relevant profile elements, a personalization engine (claim 21), or the arbiter selecting a personalization engine from the plurality of personalization engines (claim 29). Moreover, Applicants submit that one of ordinary skill in the art would not be motivated to combine the references in the manner asserted, as at least one of the references teaches away from such a combination.

No Teaching or Suggestion of Collaborative Filtering Engine, Predictive-Modeling Personalization Engine and Business-Rules Engine

Applicants submit that the features of claims 21 and 29 are not disclosed or suggested in the applied art, i.e., Kadowaki, Forecast Pro, and Perkins. In addressing claim 21, the Examiner asserts Kadowaki teaches:

... actively selecting a personalization engine from a plurality of personalization engines by the arbiter, wherein the plurality of personalization engines are a collaborative filtering engine that provides an optimal performance when information is known about a group of users, (see Kadowaki, col. 13, line 35 – col. 14, line 7) the predictive-modeling personalization engine that provides an optimal performance when a user

is unknown, (see Kadowaki, col. 11, lines 25 – 50, unknown user's default setting is the predictive modeling) and the business-rules engine provides an optimal performance when the personalization engine needs to change in response to one or more changing circumstances (see Kadowaki, col. 13, lines 40 – 10; [sic] selection between personal information and common information is optimization; col. 15, lines 41 – 45; the printer controller, which is a part of the a [sic] personalizing server, correlates the user ID information with the personalizing information from a plurality of the personalizing information); . . .

Additionally, in addressing claim 29, the Examiner asserts Kadowaki teaches:

. . . a plurality of personalization engines for selecting at least one personalized content object from the content database; (see Kadowaki, column 15, lines 41 – 45; the printer controller, which is a part of the a [sic] personalizing server, correlates the user ID information with the personalizing information from a plurality of the personalizing information), wherein the plurality of personalization engines are a collaborative filtering engine that provides an optimal performance when information is known about a group of users, (see Kadowaki, col. 13, line 35 – col. 14, line 7) the predictive-modeling personalization engine that provides an optimal performance when a user is unknown, (see Kadowaki, col. 11, lines 25 – 50, unknown user's default setting is the predictive modeling) and the business-rules engine provides an optimal performance when the personalization engine needs to change in response to one or more changing circumstances (see Kadowaki, col. 13, lines 40 – 10; [sic] selection between personal information and common information is optimization; col. 15, lines 41 – 45; the printer controller, which is a part of the a [sic] personalizing server, correlates the user ID information with the personalizing information from a plurality of the personalizing information);

Applicants respectfully disagree with the Examiner's assertions with regard to the teachings of Kadowaki.

Kadowaki is directed to an image forming system, i.e., a printing system, which allows a user to personalize a print job. Exemplary personalizations include allowing a user to store specific fonts, cover sheets, pictures, etc., which may be used whenever the user prints a job.



These personalizations are stored on personalizing servers, which are accessed by a printer controller when determining what personalizing information should be sent in response to a user ID. (See, e.g., col. 15, lines 40-53.)

Applicants have reproduced the Examiner-cited passage of Kadowaki at column 13, line 35 – column 14, line 7 below, which describes the operation of Kadowaki, stating (emphasis added):

In step S11, the printer 1 receives a print job. In step S12, the printer 1 checks whether the print job contains a user ID description and a designation of personalization explained in FIG. 7. If a designation of personalization is found, the flow advances to step S13. In step S13, the printer 1 sends machine type group ID information and user ID information to the personalizing server 3 as explained in FIG. 11A. In step S14, the printer 1 receives personalizing information from the personalizing server 3 as explained in FIG. 11B. In step S15, the printer 1 personalizes various setup data by writing the received personalizing information in the storage areas 32-1 to 32-6 shown in FIG. 10B. In step S16, the printer 1 updates the information in the storage areas 32-1 to 32-6 shown in FIG. 10B on the basis of the various designations in the print job explained in FIG. 7.

In the first embodiment, the default values of the various setup data are personalized by the personalizing information. If a print job contains designations for the various setup data, these designations are preferentially used. It is also possible to always personalize the current values of the various setup data, i.e., always preferentially use the personalizing information. Furthermore, in accordance with the position of the personalization designation L119 shown in FIG. 7 and the position of designation for certain setup data, the later designation can be preferentially used.

On the other hand, if no designation of personalization is found in step S12, the flow advances to step S17, and the printer 1 writes the contents of the data 31-1 to 31-6 common to all users, stored in the nonvolatile RAM 18, into the storage areas 32-1 to 32-6 shown in FIG. 10B, thereby setting common data as the various setup data. Then, the printer 1 updates the

information in the storage areas 32-1 to 32-6 shown in FIG. 10B on the basis of the various designations in the print job explained in FIG. 7.

In view of the above, Applicants submit that Kadowaki discloses operation in one of two situations. First, if a user can be identified (e.g., by a user ID), then the printer will load personalized settings for the user into the printer memory, such that print jobs are performed in conformance with the identified user's personalized settings. On the other hand, if the printer is not able to identify the user (i.e., no valid user ID is supplied by the user), then the printer loads default settings into printer memory, such that print jobs are performed in conformance with the default settings.

Moreover, Applicants submit that the default settings are not personalized to any user. That is, Applicants submit that the default settings, which are used when a user cannot be identified, are common to all users (who cannot be identified). In other words, when the default settings are used, these settings are common to all users, such that no personalization occurs with the default settings. Applicants have reproduced the Examiner-cited passage of Kadowaki at col. 11, lines 25 – 50 below, which states (emphasis added):

FIG. 10A shows the method where default data common to all users are held in the nonvolatile RAM 18.

In FIG. 10A, reference numeral 31-1 denotes a storage area for storing the upper-limit number of printed sheets common to all users; 31-2, a storage area for storing an available function list common to all users; 31-3, a storage area for storing normal termination report data common to all users; 31-4, a storage area for storing abnormal termination report data common to all users; 31-5, a storage area for storing user switch data common to all users; and 31-6, a storage area for storing a user name common to all users. For example, data "unknown user" is stored. Reference numeral 31-7 denotes a storage area for holding other registered

data. Data in the nonvolatile RAM 18 is not lost even when the power supply of the printer 1 is turned off. Therefore, the contents of these default data also are not lost.

In the first embodiment, the data stored in the storage areas 31-1 to 31-6 are common to all users. Accordingly, when no personalization is performed such as immediately after the power supply is turned on, the common data stored in the storage areas 31-1 to 31-6 are copied to storage areas 32-1 to 32-6 (to be described later) and used as setup values for each user. The common data stored in the storage areas 31-1 to 31-6 can also be changed by using the operation unit 14. The common upper-limit number of printed sheets and the common available function list are protected by a password so that only the manager can change these data. However, the other setup data can be changed by general users.

In view of the above, Applicants respectfully submit that, while acknowledging that Kadowaki may disclose a single personalization engine, which the Examiner designates as the recited collaborative filtering engine that provides an optimal performance when information is known about a group of users, at no point does Kadowaki disclose a plurality of personalization engines. That is, Applicants submit that Kadowaki at best only discloses a single personalization engine.

Moreover, Applicants respectfully submit that the Examiner's designation of the default setting operation of Kadowaki as the recited predictive-modeling personalization engine that provides an optimal performance when a user is unknown is unsupportable. As discussed above, Applicants submit that when a user is unknown in Kadowaki, a default setting common to all unknown users is utilized for the printing job and no personalization of a printing job is provided. As such, Applicants submit that the Examiner's designation of the default setting operation of Kadowaki as the recited predictive-modeling personalization engine that provides an optimal

performance when a user is unknown is unsupportable, as no personalization is provided by Kadowaki during the default operation.

Accordingly, for at least these reasons, Applicants submit that Kadowaki does not teach or suggest the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, as recited in claims 21 and 29.

Additionally, Applicants submit that Forecast Pro and Perkins do not cure the deficiencies of Kadowaki. That is, Applicants submit that neither Forecast Pro nor Perkins teach or suggest the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, as recited in claims 21 and 29.

Forecast Pro attempts to forecast business solutions by entering inputs into an expert system and chooses an algorithmic model, e.g., Box-Jenkins, Dynamic Regression, etc., to apply to the inputs. The result of the algorithmic model is a business forecast. However, none of the models of Forecast Pro encompass the collaborative filtering engine, the predictive-modeling personalization engine, and the business-rules engine feature of claims 21 and 29. Moreover, even if such engines were disclosed by Forecast Pro, which Applicants do not concede, there is no disclosure that the collaborative filtering engine provides an optimal performance when information is known about a group of users. Moreover, there is nothing to indicate that the predictive-modeling personalization engine provides an optimal performance when a user is unknown. Likewise, there is nothing to suggest that the business-rules engine provides an

optimal performance when the personalization engine needs to change in response to one or more changing circumstances. Accordingly, Applicants submit that Forecast Pro fails to teach or suggest the features of claims 21 and 29, and thus, does not cure the deficiencies of Kadowaki.

Perkins is directed to a process for refining results of a query to an internet search engine database. (Abstract.) Perkins includes a database table of user profiles, which Perkins uses to tailor search results to individual search engine users. (See columns 5 and 6 for exemplary profile fields.) However, at no point does Perkins disclose a personalization engine. As such, Perkins certainly does not disclose a personalization engine being a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, where the collaborative filtering engine provides an optimal performance when information is known about a group of users, the predictive-modeling personalization engine provides an optimal performance when a user is unknown, and the business-rules engine provides an optimal performance when the personalization engine needs to change in response to one or more changing circumstances. As such, Applicants submit that Perkins also fails to disclose, teach or suggest the features of claims 21 and 29, and thus, does not cure the deficiencies of Kadowaki.

Accordingly, for at least these reasons, Applicants respectfully submit that Kadowaki in view of Forecast Pro and Perkins does not teach or suggest each of the features of claims 21 and 29, and does not render the present invention unpatentable.

No Teaching or Suggestion of Selecting a Personalization Engine

Additionally, Applicants submit that Kadowaki in view of Forecast Pro and Perkins does not teach or suggest “selecting, by analysis of the relevant profile elements, a personalization engine, which is configured to provide an optimal performance, from a plurality of personalization engines,” “wherein the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine,” as recited in claim 21, and does not teach or suggest the “arbiter selecting a personalization engine from the plurality of personalization engines,” “wherein the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine,” as recited in claim 29.

In addressing these above-noted features of claim 21, the Examiner asserts that Kadowaki teaches

... actively selecting a personalization engine from a plurality of personalization engines by the arbiter, wherein the plurality of personalization engines are a collaborative filtering engine ... a predictive-modeling personalization engine ... and a business-rules engine ...

Additionally, in addressing claim 29, the Examiner asserts that Kadowaki teaches

... the arbiter selecting a personalization engine from the plurality of personalization engines, (see Kadowaki column 18, lines 38 – 44; The server and the controller select user profile from a plurality of the profiles) and the selected personalization engine selects the at least one personalization content object from the content database; (see Kadowaki column 18, lines 62 – 67, and column 19, lines 1 – 11; The server and the controller passed and retrieved user profile based on user id).

Furthermore, the Examiner states in the Response to Arguments section that (emphasis added):

Kadowaki uses a collaborative filtering engine that provides an optimal performance when user id is know. [sic] (see Kadowaki, col. 13, line 35 – col. 14, line 7) Kadowaki uses a the [sic] default setting of the predictive-modeling personalization engine when a user is unknown. (see Kadowaki, col. 11, lines 25 – 50, unknown user’s default setting is the predictive modeling) Finally, Kadowaki uses business-rules engine to choose between the optimal and predictive models. (Kadowaki, col. 13, lines 40 – 10; [sic] selection between personal information and common information is optimization; col. 15, lines 41 – 45; the printer controller, which is a part of the a [sic] personalizing server, correlates the user ID information with the personalizing information from a plurality of the personalizing information).

In view of the above, assuming *arguendo* that the Examiner’s characterization of Kadowaki’s personalization engine operation and default setting operation, and the selection amongst the two as the recited collaborative filtering engine, predictive-modeling personalization engine, and the business-rules engine, respectively, is accurate, (which Applicants do not concede) Applicants submit that even when using the Examiner’s interpretation of Kadowaki, this document does not teach or suggest each of the features of the present invention. For example, Kadowaki does not teach or suggest selecting, by analysis of the relevant profile elements, a personalization engine, which is configured to provide an optimal performance, from a plurality of personalization engines, “wherein the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine,” as recited in claim 21. Additionally, Applicants submit that even when using the Examiner’s interpretation of Kadowaki, Kadowaki does not teach or suggest the “arbitrer selecting a personalization engine from the plurality of personalization engines,” “wherein the

plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine,” as recited in claim 29.

That is, according to the Examiner’s interpretation set forth at least in the Response to Arguments section, more than one personalization engine is selected which are configured to provide an optimal performance, from a plurality of personalization engines (i.e., either the business rules engine in conjunction with the collaborative filter engine or the business rules engine in conjunction with the predictive-modeling personalization engine). As such, Applicants submit that Kadowaki does not teach or suggest selecting, by analysis of the relevant profile elements, a personalization engine, which is configured to provide an optimal performance, from a plurality of personalization engines, as recited in claim 21. Additionally, Applicants submit that Kadowaki does not teach or suggest the “arbiter selecting a personalization engine from the plurality of personalization engines, and the selected personalization engine selects the at least one personalization content object . . . ,” as recited in claim 29.

Accordingly, for these additional reasons, Applicants submit that Kadowaki does not teach or suggest each of the features of claims 21 and 29, and does not render the present invention unpatentable.

Additionally, Applicants submit that Forecast Pro and Perkins do not cure the deficiencies of Kadowaki. More specifically, Applicants submit that, as discussed above, Perkins does not teach or suggest a personalization engine, and as such, cannot teach or suggest the selection of a personalization engine. With regard to Forecast Pro, while acknowledging that this document teaches the selection of a forecasting model, as discussed further below,



Applicants respectfully submit that Kadowaki (as interpreted by the Examiner) teaches away from a combination with Forecast Pro.

As such, Applicants respectfully submit that Kadowaki in view of Forecast Pro and Perkins does not teach or suggest each of the features of claims 21 and 29, and do not render the present invention unpatentable.

References Teach Away from Examiner-Proposed Modification

Additionally, Applicants submit that Kadowaki (as interpreted by the Examiner) teaches away from the Examiner-proposed modification of Kadowaki. Applicants note that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Further, Applicants note that if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Additionally, Applicants note that if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Applicants submit that the Examiner-proposed modification of Kadowaki (i.e., the incorporation of the selection of a personalization engine as purportedly taught by Forecast Pro

within the system of Kadowaki) would render Kadowaki unsatisfactory for its intended purpose. More specifically, Applicants submit that the incorporation of the selection of a personalization engine as purportedly taught by Forecast Pro within the system of Kadowaki, would render Kadowaki unsatisfactory for its intended purpose.

That is, Applicants submit that the intended purpose of Kadowaki is directed to performing print jobs while allowing a user to perform a print job with personalized settings. However, modifying the method and system of Kadowaki as the Examiner asserts, by incorporation of the selection of a personalization engine as purportedly taught by Forecast Pro within the system of Kadowaki, would preclude Kadowaki from operating in its intended manner.

As noted above, in addressing claims 21 and 29, the Examiner designated the personalization engine operation of Kadowaki as the recited collaborative filtering engine, the default setting operation of Kadowaki as the recited predictive-modeling personalization engine, and the selection amongst the two operations of Kadowaki (i.e., the personalization engine operation and the default setting operation) as the recited business-rules engine. Thus, as discussed above, according to the Examiner's interpretation set for at least in the Response to Arguments section, more than one personalization engine (from a plurality of personalization engines) is required to provide an optimal performance, (i.e., either the business rules engine in conjunction with the collaborative filter engine or the business rules engine in conjunction with the predictive-modeling personalization engine).

In view of the above, Applicants submit that were Kadowaki to be modified in the manner asserted by the Examiner, by substituting the selection of a personalization engine as purportedly taught by Forecast Pro (i.e., the selection of a single engine from a plurality of personalization engines to provide an optimal performance) for the selection process of Kadowaki (which the Examiner asserts requires two of the Examiner-designated personalization engines of Kadowaki), Applicants submit that Kadowaki would be unsuitable for its intended purpose. That is, Applicants submit that Kadowaki (as interpreted by the Examiner) requires selection of two Examiner-designated personalization engines to provide the optimal performance, such that modifying Kadowaki, such that only a single personalization engine is selected, would preclude Kadowaki from operating in its intended manner.

As such, for at least these reasons, Applicants respectfully submit that the Examiner-proposed modification of Kadowaki would render Kadowaki unsatisfactory for its intended purpose. Accordingly, Applicants respectfully submit that there is no suggestion or motivation to make the proposed combination of Kadowaki, Forecast Pro and Perkins.

Additionally, Applicants submit that the Examiner-proposed modification of Kadowaki (i.e., the incorporation of the selection of a personalization engine as purportedly taught by Forecast Pro within the system of Kadowaki) would change the principle of operation of Kadowaki. That is, as discussed above, according to the Examiner's interpretation set for at least in the Response to Arguments section, more than one personalization engine (from a plurality of personalization engines) is required to provide an optimal performance, (i.e., either the business

rules engine in conjunction with the collaborative filter engine or the business rules engine in conjunction with the predictive-modeling personalization engine).

In view of the above, Applicants submit that were Kadowaki to be modified in the manner asserted by the Examiner, by substituting the selection of a personalization engine as purportedly taught by Forecast Pro (i.e., the selection of a single engine from a plurality of personalization engines to provide an optimal performance) for the selection process of Kadowaki (which the Examiner asserts requires two of the Examiner-designated personalization engines of Kadowaki), Applicants submit that the modification of Kadowaki would change the principle of operation of Kadowaki.

That is, Applicants submit that Kadowaki (as interpreted by the Examiner) requires selection of two Examiner-designated personalization engines to provide the optimal performance, such that modifying Kadowaki, such that only a single personalization engine is selected, would change the principle of operation of Kadowaki (as interpreted by the Examiner).

As such, for at least these reasons, Applicants submit that the Examiner-proposed modification of Kadowaki would change the principle of operation of Kadowaki. Accordingly, Applicants respectfully submit that the teachings of the Kadowaki, Forecast Pro and Perkins are not sufficient to render the claims *prima facie* obvious.

#### Not All Features Addressed

Furthermore, Applicants submit that the Examiner has not properly addressed each of the features of claims 21 and 29. More specifically, Applicants submit that the Examiner never

addressed “accessing a content database via a content database proxy to retrieve a personalized content object identified by the personalization engine selected by the arbiter,” as recited in claim 21, and never addressed “the selected personalization engine selects the at least one personalization content object from the content database via a content database proxy . . .,” as recited in claim 29. Additionally, Applicants submit that the Examiner never addressed “passing a request object excluding any profile elements to an input logic,” as recited in claim 21.

As such, for at least these reasons, as discussed further below, Applicants submit that the Examiner has not presented a complete action or a clear record.

*Dependent Claims 24, 28, 30, 33 and 34 over of Kadowaki, Forecast Pro and Perkins*

Claims 24, 28, 30, 33 and 34 are dependent claims, depending from respective distinguishable independent claims. For these reasons, Applicants submit that these claims are allowable for at least the reasons discussed above with respect to independent claims 21 and 29.

Accordingly, for at least these reasons, Applicants respectfully request the rejection over claims 21, 24, 28 – 30, 33 and 34 be withdrawn.

*Independent Claim 35 over Kadowaki in view of Forecast Pro, Jacobi, and Perkins*

Applicants submit that it would not have been obvious to one of ordinary skill in the art to combine Kadowaki, Forecast Pro, Jacobi, and Perkins in the manner asserted by the Examiner. Claim 35 recites, in pertinent part:

... selecting with the arbiter a personalization engine by analysis of the relevant profile elements, wherein the personalization engine is at least one of a

collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, the collaborative filtering engine provides an optimal performance when information is known about a group of users based on statistical knowledge, the predictive-modeling personalization engine provides an optimal performance when a user is unknown based on a short-term usage path of the user, and the business-rules engine provides an optimal performance when the personalization engine needs to change in response to one or more changing circumstances...

As discussed above, Kadowaki is directed to a printing apparatus, in which personalized printing settings for a user may be enabled by entering a user ID. If no user ID is entered, then the printer operates using default settings common to all unidentified users.

The Examiner cites Jacobi to address the on-line shopping feature of the claimed invention. Jacobi is directed to a system and method for collecting ratings from users, which may be used to generate product or service recommendations to users. In embodiments, Jacobi includes presenting a browsable catalog of items on a web site that can be purchased on the web site. Moreover, Jacobi provides methods for automatically populating the recommendation service (i.e., the collected ratings from users) with service items within the catalog.

In setting forth the obviousness rejection, the Examiner asserts that:

... it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Jacobi with the method of Kadowaki and Forecast Pro in order to provide online shipping [sic] recommendations to the user.

Applicants respectfully disagree.

Applicants submit that the Examiner's proffered motivation of providing online shopping recommendations to a user is unsupported. That is, there is no teaching or suggestion that the printing apparatus of Kadowaki in any way is operable to perform online shopping or would be

operable to receive any user recommendations to facilitate online shopping. As noted above, Kadowaki is directed to a printing apparatus (e.g., a photocopier or printer). Kadowaki is not directed to a shopping tool, does not provide for online shopping and does not process any user recommendations.

Moreover, Applicants submit that the Examiner has not demonstrated a reasonable expectation of success for such a combination of references. That is, the Examiner has not shown that one of ordinary skill in the art would have an expectation of success in combining a printer that allows for personalized settings for print jobs, as taught in Kadowaki with the on-line rating and shopping system of Jacobi.

As such, Applicants respectfully submit that the Examiner has not set forth a *prima facie* case of obviousness, and the combination of Kadowaki, Forecast Pro, Jacobi and Perkins does not render claim 35 unpatentable.

Dependent Claims 22, 31, 32 and 36 – 44 over Kadowaki, Forecast Pro, Jacobi and Perkins

Claims 22, 31, 32 and 36 – 44 are dependent claims, depending from respective distinguishable independent claims. For this reason, Applicants submit that these claims are allowable for at least the reasons discussed above with respect to independent claims 21, 29 and 35.

Additionally, Applicants submit that the rejection of claims 22, 31 and 32 is *per se* improper. More specifically, claims 21 and 29 were rejected under 35 U.S.C. § 103(a) over

Kadowaki in view of Forecast Pro and Perkins. However, claims 22, 31 and 32, which each depend from either claim 21 or 29, were rejected under 35 U.S.C. § 103(a) over Kadowaki and Forecast Pro, in view of Jacobi and in further view of Perkins. As such, Applicants submit that the rejection of claims 22, 31 and 32 is *per se* improper.

Accordingly, for at least these reasons, Applicants respectfully request the rejection over claims 22, 31, 32 and 35 – 44 be withdrawn.

*Dependent Claim 27 over Kadowaki, Forecast Pro, Perkins, Jacobi and Tetzlaff*

Claim 27 is a dependent claim, depending from a distinguishable independent claim. For this reason, Applicants submit that this claim is allowable for at least the reasons discussed above with respect to independent claim 21.

Accordingly, Applicants respectfully request the rejection over claim 27 be withdrawn.

*Dependent Claims 23 and 25 over Kadowaki, Forecast Pro, Perkins and Kurtzman*

Claims 23 and 25 are dependent claims, depending from a distinguishable independent claim. For this reason, Applicants submit that these claims are allowable for at least the reasons discussed above with respect to independent claim 21.

***Complete Action Not Provided***

As discussed above, Applicants respectfully submit that the Examiner has not provided a complete action. More specifically, Applicants respectfully submit that the Examiner did not



specifically address “accessing a content database via a content database proxy to retrieve a personalized content object identified by the personalization engine selected by the arbiter,” as recited in claim 21, and never addressed “the selected personalization engine selects the at least one personalization content object from the content database via a content database proxy . . . ,” as recited in claim 29. Additionally, Applicants submit that the Examiner never addressed “passing a request object excluding any profile elements to an input logic,” as recited in claim 21.

Furthermore, as noted above, Applicants submit that the Examiner maintained his rejections without addressing Applicants’ proffered arguments. Applicants respectfully remind the Examiner of the guidance provided by MPEP § 707.07(f), which states (emphasis added):

In order to provide a complete application file history and to enhance the clarity of the prosecution history record, an examiner must provide clear explanations of all actions taken by the examiner during prosecution of an application.

...

Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant’s argument and answer the substance of it.

However, in addressing at least claims 21, 28 and 35, the Examiner repeated the rejection of these claims without addressing Applicants’ presented arguments. For example, the Examiner never addressed the arguments that none of the references teach a collaborative filtering engine, predictive filtering engine and a business rules engine, or that none of the references teach the recited selecting a personalization engine. Additionally, the Examiner never addressed the arguments that the combination of references teach away from a combination in the manner asserted, and the argument that each of the claim features have not been addressed. Furthermore,

Applicants submit that the Examiner did not address any arguments regarding the dependent claims. That is, while the Examiner does include a Response to Arguments section, he never specifically addressed any of the above-noted arguments.

Thus, for at least these reasons, Applicants submit the Examiner did not provide a complete action or a clear record. Thus, Applicants submit that a clear issue was not developed between the Examiner and Applicants. More specifically, MPEP §706 states:

Before final rejection is in order a clear issue should be developed between the examiner and applicant. To bring the prosecution to as speedy conclusion as possible and at the same time to deal justly by both the applicant and the public, the invention as disclosed and claimed should be thoroughly searched in the first action and the references fully applied; and in reply to this action the applicant should amend with a view to avoiding all the grounds of rejection and objection.

Additionally, MPEP 706.07(a) notes:

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p). ...

Furthermore, a second or any subsequent action on the merits in any application ... will not be made final if it includes a rejection, on newly cited art, other than information submitted in an information disclosure statement filed under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17 (p), of any claim not amended by applicant or patent owner in spite of the fact that other claims may have been amended to require newly cited art.

Accordingly, Applicants respectfully request that, if the Examiner maintains any of the

previously presented rejections, the Examiner specifically address the untreated features of the present invention and address each of Applicants' arguments. Moreover, Applicants respectfully submit that the next action, which should clarify the record, should not be a final action.

### CONCLUSION

Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby makes a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 09-0457.

Respectfully submitted,  
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